

PHASE I BOOK EXPLOITATION SOV/5873

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Medvedev, Sergey Fedorovich, Doctor of Technical Sciences, Professor
Tsiklicheskaya prochnost' metallov (Cyclic Strength of Metals) Moscow, Mashgiz,
1961. 302 p. Errata slip inserted. 6000 copies printed.

Reviewer: I. V. Kudryavtsev, Doctor of Technical Sciences, Professor; Ed.: A. G.
Nikitin, Engineer; Ed. of Publishing House: Ye. Ya. Savel'yev; Tech. Eds.:
T. F. Sokolova and A. F. Uvarova; Managing Ed. for Literature on General
Technology: A. P. Kozlov, Engineer.

PURPOSE: This book is intended for scientific research workers and engineers in
the metalworking industry, machine building, and engineering construction. It
may also be useful to students at schools of higher technical education.

COVERAGE: An exposition of present knowledge on cyclic (dynamic) strength of
metals, particularly steel, is given. Technological, mechanical, thermal,
and thermochemical methods of increasing the strength of metals are outlined.
Data are given on the corrosion fatigue strength and adsorption fatigue strength
of steel as well as on the fatigue strength of cast iron and nonferrous metals

Card 1/1

Cyclic Strength of Metals

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and alloys. The impact strength of metals under single or repeated action of external loads is briefly discussed. No personalities are mentioned. There are 128 references: 104 Soviet, 17 English, 6 German, and 1 French.

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ROZEN, A.M.; KARPACHEVA, S.M.; MEDVEDEV, S.F.; RODIONOV, Ye.P.; KISELEVA, L.F.

Mass transfer in the extraction and reextraction of uranyl nitrate
in packed columns. Ekstr.; teor.,prim.,app. no.2:284-293 '62.

(MIRA 15:9)

(Uranyl nitrate) (Extraction (Chemistry))
(Mass transfer)

KARPACHEVA, S.M., doktor khimicheskikh nauk; MEDVEDEV, S.F., inzh.; ZAKHAROV, Ye.I.,
inzh.; BELOV, Yu.A., inzh.

Effect of pulsation on the operation of packed columns. Khim.mashinostr.
no.2:14-17 Mr-Ap '63. (MIRA 16:4)
(Packed towers)

MEDVEDEV, S. I.

Itogi novogo zheleznodorozhnogo stroitel'stva za shest' mesiatsev 1934 goda.
[The results of new railroad construction for the first six months of 1934). (Transportnoe stroitel'stvo, 1934, no. 8, p. 3-4).

DLC: HE7.T7

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress,
Reference Department. Washington. 1952. Unclassified.

MEDVEDEV, S. I.

Novoe zheleznodorozhnoe stroitel'stvo mezhdru VI i VII S'ezdami Sovetov SSSR. [The new railway construction between the 6th and the 7th Congresses of the Soviets of the U.S.S.R.] (Transportnoe stroitel'stvo, 1935, no. 1, p. 5-7).
DLC: HE7.T7

Zheleznodorozhnoe stroitel'stvo vo 1933 godu. [Railway construction in 1933] (Transportnoe stroitel'stvo, 1934, no. 1, p. 18-20)
DLC: HE7.T7

SO; Soviet Transportation and Communication, A Bibliography, Library of Congress, Washington. 1952. Unclassified.

MEDVEDEV, S.I., inzh.

Mechanization of accounting and computing operations.
Zhel.dor.transp. 42 no.1:23-27 Ja '60.

(MIRA 13:5)

1. Zamestitel' nachal'nika tresta "Transorgmashuchet" Ministerstva
putey soobshcheniya.
(Railroads--Accounting) (Machine accounting)

15

Methods of destruction of the gray beet bug larvae, *Poeciliscytus cognatus* Fieb., in the Altai region (western Siberia). I. M. Yarmolenko and S. I. Medvedev. *Bull. Plant Protection (U. S. S. R.)* 1940, No. 6, 10-11. — Satisfactory results were obtained by spraying with 8% emulsions of spent oil and petroleum resins. 0.5% of soap. The nos. of *Poeciliscytus cognatus* Fieb. larvae killed were 79.4 and 79.0%, resp. Spraying with spindle oil, hydroxybiphenyl, nicotine sulfate and polychlorobenzenes was less satisfactory. Best results were obtained with 10% spindle oil, 12% hydroxybiphenyl and 18% polychlorobenzenes. The percentages of the destroyed larvae were 81.0, 80.0, 73.8 and 70.4%, resp. Since all these preps. produce burns on the plants, they must be used only on weeds.

W. R. Henn

MEDVEDEV, S. I.

Rutelinae (Khlebnue zhuki i blizkie gruppy) (Scarabaeidae, subfamily Rutelinae)
Moskva, Akad. nauk SSSR, 1949. 371 p. maps. (Fauna SSSR, Novaya seriia, no. 36)

1. Scarabaeidae.

VOLCHANETSKIY, I.B., prof.; MEDVEDEV, S.I., prof.

Formation of the shelterbelt fauna. Uch.zap. KHGU 33:7-31 '50.
(MIRA 11:11)

1. Otdel ekologii Nauchno-issledovatel'skogo instituta biologii
Khar'kovskogo gosudarstvennogo universiteta (direktor - zaslu-
zhennyy deyatel' nauki prof. A.Ya. Nagornyy, zav. otdelom - prof.
I.B. Volchanetskiy).
(Ukraine--Forest fauna) (Windbreaks, shelterbelts, etc.)

MEDVEDEV, S.I., prof.

Development of insect fauna in the Askaniya-Nova parks. Uch.zap.
(MIRA 11:11)
KHGU 33:67-88 '50.

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta
im. A.M. Gor'kogo (zaveduyushchiy kafedroy - prof. S.I. Medvedev).
(Askaniya-Nova Preserve--Forest insects)

MEDVEDEV, S.I., prof.

Preliminary communication on the study of insects in the Proval'ye
Steppe, Voroshilovgrad Province. Uch.zap. KHGU 33:89-107 '50.
(MIRA 11:11)

1. Otdel ekologii Nauchno-issledovatel'skogo instituta biologii
Khar'kovskogo gosudarstvennogo universiteta (direktor - zasluzhennyy
dayatel' nauki prof. A.V. Nagornyy, zaveduyushchiy otdelom - prof.
I.B. Volchanetskiy).

(Proval'ye Steppe--Insects)

MEDVEDEV, S.I.

Scarabaeidae

New species of the genus *Mothon*. Sem. et Medv. (Coleoptera, Scarabaeidae) Ent. ob.
31, No. 3, 1951

9. Monthly List of Russian Accessions, Library of Congress, September ~~1953~~ ¹⁹⁵², Uncl.

MEDVEDEV, S. I.

Larvae of the Coleoptera of the USSR. Moskva, Izd-vo Akad. Nauk SSSR, 1952. 342 p.
(Opredeliteli po faune SSSR, 47)

PPAN

1. Beetles.

MEDVEDEV, S. I.

Scarabaeidae

"Leaf-horned beetles (Scarabaeidae), sub. fam. Melolonthinae (cockchafer)."

S. I. Medvedev. Reviewed by O. Kryzhanovskiy, Zool. zhur. 31, no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

MEDVEDEV, S. I., BOZHKO, M. P., SHAPIRO, P. S.

Insects-Ukraine

Effect of irrigation on the entomofauna in the region of the Kakhovka Hydroelectric Power Station and the South Ukrainian Canal. Zool. zhur. 31, no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952, UNCLASSIFIED.

MEDVEDEV, S.I.

Notes on the-aquatic insect fauna of small depressions in the
steppe. Ent.oboz. 32:212-218 '52. (MLRA 7:1)

1. Kafedra entomologii Khar'kovskogo Gosudarstvennogo universi-
teta im. A.M.Gor'kogo. (Insects, Aquatic)

MEDVEDEV, S.I.

New species of the genus *Osmoderma* Serv. (Coleoptera, Scarabaeidae)
from Georgia. Ent.oboz. 33:297-299 '53. (MLRA 7:5)

1. Kafedra entomologii Khar'kovskogo Gosudarstvennogo universiteta
im. A.M.Gor'kogo. (Georgia--Scarabaeidae) (Scarabaeidae--Georgia)

MEDVEDEV, S.I.

Principal features of the insect fauna found in the construction zone of
the Kakhovka Hydroelectric Station. Zool.zhurn. 32 no.6:1126-1140 N-D '53.
(MIRA 6:12)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta im.
A.M.Gor'kogo.
(Kakhovka Region--Insects) (Insects--Kakhovka Region)

MEDVEDEV, S.I.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the field of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Medvedev, S.I.	✓ "Coleoptera" in "Fauna of the USSR," Vol X, No 1.	Khar'kov State University
	✓ "Lamellicornia-Parts I and II"	imeni A.M. Gor'kiy
	"Larvae of Lamellicornia" in "Fauna of the USSR"	

MEDVEDEV, S.I.

Characteristics of the occurrence of certain ecological forms
of insects in various environmental and geographical zones
of the Ukraine. Zool.shur. 33 no. 6:1245-1263 N-D '54.
(MIRA 8:2)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo univer-
siteta im. A.M.Gor'kogo.
(Ukraine--Insects--Geographical distribution)

Medvedev, S.I.

A-2

USSR/General Division - History. Classics. Personalities.

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 29.

Author : I.B. Volchanetskiy, S.I. Medvedev, and M.P. Volovik.

Inst :

Title : Sketch of the History of Zoology at the University of Kharkov.

Orig Pub : Uch. zap. Kharkovsk. un-ta, 1955, 59, 81-122.

Abst : The History of the development of the science of zoology at the university of Kharkov for the past 150 years is described. The activities of I.A. Krinitskiy, A.V. Chernaya, A.F. Brandt, N.N. Somov, A.M. Nikolskiy, P.P. Sus-hkin, V.V. Stanchinskiy, I.B. Volchanetiskiy, G.F. Arnol'd E.E. Umanskiy, and others is characterized in detail. As part of the activities of the Kharkov zoologists before the Great October Revolution were the investigations of the fauna of the Kharkov Area and other parts of the Ukraine and Russia, the description and systematization of the

Card 1/2

USSR / General and Special Zoology. Insects.

P

Abs Jour: Ref Zhur-Biol., No 3, 1958, 11549

Author : Medvedev S. I.

Inst : Not given

Title : On the Role of the Carpathian Mountains in the Formation of the Ukraine Entomological Fauna.

Orig Pub: Nauchn. zap. Uzhgorodsk. un-ta, 1956, 21, 57-65

Abstract: The entomological fauna of the Carpathians (mostly beetles), its similarity with and didtinction from the entomological fauna of the nearest regions are described. The carpathians as a zoogeographical barrier. Faunal elements and endemics in the Carpathian fauna are indicated.

Card 1/1

MEDVEDEV, S.I.

Description of two species of scarabaeid larvae (Coleoptera, Scarabaeidae)
Ent.obez.35 no.1:148-151 '56. (MLRA 9:10)

1.Kafedra entomologii Khar'kovskogo Gosudarstvennogo universiteta, Khar'-
kov.

(Scarabaeidae) (Larvae)

MEDVEDEV, S. I.

USSR/Special and General Zoology - Insects.

0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69728

Author : Medvedev, S.I.

Inst :

Title : The Description of Two Species of Coleoptera, Scarabaeidae in Turkmenia.

Orig Pub : Zool. Zh. 1956, 35, No 4, 556-559

Abstract : A description of Achranoxia koenigi Brske and Leucoserica arenicola Solsky, collected in the sand under the roots of Aristida pennate on the edge of Kara-Kum desert is given (Ashkhabadsk region).

Card 1/1

- 17 -

MEDVEDEV, S.I.

A new species of *Lethrus* (Coleoptera, Scarabaeidae) from Tajikistan
[with summary in German]. Ent. oboz. 36 no.3:695-698 '57.

(MLBA 10:9)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta,
Khar'kov.

(Fayzabad District--Scarabaeidae)

MEDVEDEV. S.I.

Materials on the study of the larvae of scarabaeid beetles (Coleoptera, Scarabeidae) of Tajikistan [with summary in English]. Zool.zhur. 36 no.12:1814-1825 D '57. (MIRA 11:1)

1.Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta.
(Tajikistan--Scarabeidae) (Larvae--Insects)

USSR / General and Special Zoology. Insects. System- P
atics and Faunistics.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 63824.

Author : Medvedev, S. I.
Inst : Khar'kov University.
Title : An Experiment in Eco-zoogeographical Division
of the Ukraine into Regions on the Basis of
Its Entomological Fauna.

Orig Pub: Uch. zap. Khar'kovsk. un-ta, 1957, 84, Tr.
n.-i. in-ta biol. i biol. fak., 27, 5-26.

Abstract: A new division of the Ukraine and Crimea into
zoogeographical zones and subzones, and within
their bounds into districts is offered. The
proposed divisions into regions approximates
the geobotanical, but often conforms but slight-
ly with the division, based on the distribution

Card 1/4

10

USSR / General and Special Zoology. Insects. System- P
atics and Faunistics.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 63824.

Abstract: of the vertebrates, because poikilothermal animals depend more on changes in the environment and react to its small variations, whereas homo-thermal animals often do not react to them. The division is made on the basis of comparing the systematic composition of insects in various territories, their zoogeographic origin, the distribution on biotypes and the numbers of individual species. The zone of broad-leaved and mixed forests in Ukraine is divided into districts: right-shore Poles'ye, left-shore Poles'ye, Trans-Carpathian district, Carpathian Mountains, Near-Carpathian and Bessarabian-Podol districts. The forest-steppe zone includes five districts: Bessarabian forest-steppe, Volyn',

Card 2/4

USSR / General and Special Zoology. Insects. System- F
atics and Faunistics.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 63824.

Abstract: right-shore Dnieper, left-shore Dnieper and East Ukrainian. The steppe zone is divided into three subzones: varied-grass-tipchak-feather steppe, tipchak feather steppe and wormwood-tipchak-feather steppe. The first subzone includes the districts: Bessarabian steppe, Dniester-Bug, Dnieper-Bug, East Trans-Dnieper, Doniets-Don district and Azov. The second subzone is divided into districts: Danube, Odessa, South Dnieper, Zapor zh'ye and South Trans-Dnieper. The third subzone includes only one district: Black Sea Sivash district. Crimea is divided into two sections: the steppe and the mountainous. Nature

Card 3/4

MEDVEDEV, S.I.

A new species of the genus *Onthophagus* (Coleoptera, Scarabaeidae)
from Turkmenia [with summary in German]. Ent. oboz. no; 3:717-719
'58. (MIRA 11;10)

1. Kafédra entomologii Kha'kovskogo gosudarstvennogo universiteta,
Khar'kov.

(Turkmenistan--Scarabaeidae)

MEDVEDEV, S.I.; MEDVEDEV, G.S.

Description of the larvae of two species of dung beetles
(Coleoptera, Scarabaeidae) from Turkmenia. Ent.oboz. 37
no.4:909-913 '58. (MIRA 11:12)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo
universiteta, Khar'kov.
(Kara-Kala--Scarabaeidae) (Syunt, Mount--Scarabaeidae)

USTINOV, Aleksandr Aleksandrovich, doktor biolog.nauk; MEDVEDEV, S.I.,
prof., otv.red.; NESTERENKO, A.S., red.; CHURIY, Ye.V.,
tekhred..

[Gall nematode; a monograph on agronomic helminthology] Gallovaia
nematoda; monografiia po agronomicheskoi gel'mintologii. Khar'kov.
Izd-vo Khar'kovskogo gos.univ., 1959. 292 p. (MIRA 13:5)
(Nematode diseases of plants)

MEDVEDEV, S.I.

Basic characteristics of changes in the insect fauna of the Ukraine
due to the formation of a cultural landscape. Zool.zhur. 38
no.1:54-68 Ja '59. (MIRA 13:4)

1. Chair of Entomology, Kharkov State University.
(Ukraine--Insects, Injurious and beneficial)
(Zoology--Ecology)

MEDVEDEV, S.I.

New species of lamellicorn beetles (Coleoptera, Scarabaeidae)
from Tajikistan. Ent. oboz. 38 no.4:860-878 '59 (MIRA 13:3)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta,
Khar'kov.
(Tajikistan--Scarabaeidae)

MEDVEDEV, Sergey Ivanovich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;
BYKHOVSKIY, B.Ye., red.; STRELKOV, A.A., red.; SHTA.ZEL'BERG,
A.A., red.; KRYZHANOVSKIY, O.L., red.vypuska; KRUGLIKOV, N.A.,
tekhn.red.

[Coleoptera. Vol.10, no.4: Lamellicorns (Scarabaeidae); sub-
families Eucherinae, Dynastinae, Glaphyrinae, Trichiinae]
Plastinchatousye (Scarabaeidae). Podsem. Eucherinae, Dynastinae,
Glaphyrinae, Trichiinae. Moskova, Izd-vo Akad. nauk SSSR, 1960.
397 p. (Fauna SSSR, no.74) (MIRA 13:4)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy).
(Scarabaeidae)

BATIASHVILI, I.D.; BEY-BIYENKO, G.Ya.; BOGDANOV-KAT'KOV, N.N.; GERASIMOV, B.A.; GILYAROV, M.S.; DMITRIYEV, G.V.; ZVEREZOMB-ZUBOVSKIY, Ye.V.; ZIMIN, L.S.; KOLOBOVA, A.N.; MEDVEDEV, S.I.; MISHCHENKO, A.I.; PETROV, A.I.; RYABOV, M.A.; SAVZDARG, E.E.; SELIVANOVA, S.N.; SKORIKOVA, O.A.; TROPKINA, M.F.; SHAPOSHNIKOV, G.Kh.; SHCHEGOLEV, V.N., prof., doktor sel'skokhoz.nauk; ESTERBERG, L.K.; YAKHONTOV, V.V.; REUTSKAYA, O.Ye., red.; CHUNAYEVA, Z.V., tekhn.red.

[Classification of insects on the basis of damage to crops] Opre-
delitel' nasekomykh po povrezhdeniyam kul'turnykh rastenii. Izd.4.
perer. i dop. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 607 p.
(MIRA 14:1)

(Insects, Injurious and beneficial)

KRYZHANOVSKIY, O.L.; MEDVEDEV, S.I.

Materials on the fauna and ecology of lamellicorn beetles
(Coleoptera, Scarabaeidae) in western Turkmenistan.
Trudy Zool. inst. 27:183-207 '60. (MIRA 13:9)

1. Zoologicheskii institut Akademii nauk SSSR, Leningrad i
Kafedra entomologii Khar'kovskogo gosudarstvennogo
universiteta, Khar'kov.
(Turkmenistan--Scarabaeidae)

MEDVEDEV, S.I.

Origin of the Crimean insect fauna [with summary in English]. Ent.
oboz. 39 no.1:34-51 '60. (MIRA 13:6)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta.
Khar'kov. (Crimea--Insects)

MEDVEDEV, S.I.

Description of larvae of eight lamellicorn species (Coleoptera,
Scarabaeidae from the Ukraine and Central Asia. Zool.zhur. 39
no.3:381-393 '60. (MIRA 13:6)

1. Kharkov State University.
 (Odessa Province--Scarabaeidae)
 (Soviet Central Asia--Scarabaeidae)
 (Larvae--Insects)

KOLDOBSKIY, A.G.; MEDVEDEV, S.I.; PISKOPPEL', F.G.; YAKOBSON, M.G. ^{Prinimali}
uchastie: BERKHIN, I.B.; OSLIKOVSKAYA, Ye.S.; PEREKISLOVA, A.M.;
LITVIN, V.M.; PARKHOMENKO, Ye.V.; STOTIK, A.M.; SHAPIRO, T.I.; STRU-
MILIN, S.G., akad., glav. red.; ALEKSENKO, G.V., red.; ANISIMOV, N.I.,
red.; VOLODARSKIY, L.M., red.; GERSHBERG, S.R., redaktor;
red.; PETROV, A.I., red.; POSVYANSKIY, S.S., red.; BAZAROVA, G.V.,
kand. ekonom. nauk, starshiy nauchnyy red.; KISEL'MAN, S.M., starshiy
nauchnyy red.; LIVANSKAYA, F.V., kand. ekonom. nauk, starshiy nauchnyy
red.; GLAGOLEV, V.S., nauchnyy red.; NEDBAYEV, V.I., nauchnyy red.;
TUMANOVA, N.L., nauchnyy red.; TOVMASYAN, M.E., red.; BLAGODARSKAYA,
Ye.V., mladshiy red.; SHUSTROVA, V.M., mladshiy red.; ZENTSEL'SKAYA,
Ch.A., tekhn. red.

[The economic life of the U.S.S.R.; chronicle of events and facts,
1917-1959] Ekonomicheskaya zhizn' SSSR; khronika sobytii i faktov
1917-1959. Glav. red. S.G.Strumilin. Chleny red. kollegii: Alekseenko
i dr. Moskva, Gos. nauchn.izd-vo "Sovetskaya entsiklopediya," 1961.
779 p. (MIRA 14:10)

1. Tsentral'naya nauchnaya sel'skokhozyaystvennaya biblioteka Vse-
soyuznoy akademii sel'skokhozyaystvennykh nauk im. Lenina (for Litvin,
Parkhomenko, STOTIK, Shapiro).
(Russia--Economic conditions)

MEDVEDEV, S.I.

Description of the larvae of three species of the lamellicorn
superfamily (Coleoptera, Lamellicornia) from Tajikistan. Ent.
oboz. 40 no.2:385-389 '61. (MIRA 14:6)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta
imeni A. M. Gor'kogo.
(Tajikistan--Scarabaeidae)
(Larvae--Insects)

NEL'ZINA, Ye.N.; MEDVEDEV, S.I.

Insect associations of the nest of the lesser suslik (*Citellus pygmaeus* Pall) in West Kazakhstan. Zool. zhur. 41 no.2:217-220
F '62. (MIRA 15:4)

1. State University of Kharkov and Research Anti-Plague Institute of Rostov-on-Don.
(West Kazakhstan Province--Susliks) (Insects)

MEDVEDEV, S.I.

Description of the larvae of two species of the subfamilies
Rhizotroginae (Coleoptera, Scarabaeidae) from Turkmenistan.
Zool. zhur. 41 no.2:290-293 F '62. (MIRA 15:4)

1. Department of Entomology, State University of Kharkov.
(Turkmenistan--Scarabaeidae)

MEDVEDEV, S.I.

New and little-known species of scarab beetles (Coleoptera,
Scarabaeidae), from Central Asia. Ent. obozr. 41 no.3:596-612
'62. (MIRA 15:10)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo Universiteta,
Khar'kov.
(Soviet Central Asia—Scarabaeidae)

MEDVEDEV, S.I.

Importance of preserves and virgin areas for studying the characteristics of the formation of entomofauna in Quaternary landforms.
Vop. ekol. 7:111-113 '62. (MIRA 16:5)

1. Khar'kovskiy gosudarstvennyy universitet.
(Insects) (Ecology)

MEDVEDEV, S.K., inzh.

Calculation of the electrical strength of a laminated dielectric.
Elektrichestvo no.8:62-66 Ag '63. (MIRA 16:10)

1. Zavod "Kondensator."

MEDVEDEV, S.I.

Description of the larva of *Aphodius gagatinus* Men. (Coleoptera, Scarabaeidae). Zool. zhur. 43 no.11:1724-1725 '64.
(MIRA 18:11)

1. Kafedra entomologii Khar'kovskogo gosudarstvennogo universiteta.

MEDVEDEV, S.I.

larva of the lamellipon. beetle *Phryganea* sp. (Phryganeidae, Scarabaeidae) from Turkmenia. *Tr. Khark. gos. univ. Ser. biolog. nauki* 1981, 14: 1-2.

1. Chair of Entomology, State University of Kharkov.

COMMON ELEMENTS										COMMON VARIANTS INDEX									
MATERIALS INDEX										PROCESS AND PROPERTIES INDEX									
SA										B 54									
771. Capacitor characteristics for power factor correction at 50 c/s. Medvedev, S. K. <i>Vestn. Elektromash. (No. 8) 20-2 (1944) In Russian.</i>—A modern Russian series of p.f. correcting capacitors for voltages of 220 V to 10 kV, impregnated in mineral oil, is described. The working voltage gradient is 12-13 kV/mm, max. internal temp. rise under working conditions 27-5°C. Full description, illustrated by curves and drawings, is supplied.										A. L.									
ASB-SLB METALLURGICAL LITERATURE CLASSIFICATION										62-472.12-17									
FROM SOURCE										FROM SOURCE									
GROUP 1										GROUP 2									
GROUP 3										GROUP 4									
GROUP 5										GROUP 6									
GROUP 7										GROUP 8									
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MEDVEDEV, S. K.

"Measurement of the angle of dielectric Losses When Direct and Alternating Currents are Simultaneously Applied," Electricity, Publ. by the Printing House of the Govt. Energy (Electrical) Publ. House, in Moscow, 1952.

MEDVEDEV, S. K.

PA 237T17

USSR/Electricity - Capacitors
Dielectric Losses

Jun 52

"Measuring the Dielectric Loss Angle Under Simul-
taneous Application of AC and DC Voltages," Engr
S. K. Medvedev, Serpukhov

"Elektrichestvo" No 6, pp 52-54

Examines method (in which existing equipment can
be used) for measuring dissipation factor of ca-
pacitors subjected to simultaneous ac and dc volt-
ages. Cites results of measurements for capaci-
tors filled with different liquid dielectrics
(mineral oil, sovol, silicones, etc). Submitted
16 Feb 52.

237T17

MEDVEDEV, S. K.

AID P - 3034

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 21/33

Authors : Morozov, M. M., Kand. of Tech. Sci., and S. K. Medvedev, Eng.

Title : Capacitors for power installations

Periodical : Elektrichestvo, 7, 123-129, J1 1955

Abstract : According to the author a-c capacitors of commercial frequency at present have the widest application. They have been greatly improved recently. In the USSR production of special capacitors was started: 1) series capacitors to compensate the reactance of transmission lines, 2) and for high-frequency communication and protection. Series capacitors for outdoor installations have a great overload capacity and permit short voltage surge up to four times the nominal voltage. The author points out most important problems to be solved in the immediate future in power capacitor design and production.

M-1204
30 Aug 56

Medvedev, S.K.

110-4-12/25

AUTHOR: Medvedev, S.K., Engineer

TITLE: High-frequency Capacitors with Impregnated Paper Dielectric
(Kondensatory povyshennoy chastoty s dielektrikom iz propitannoy bumagi)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, No. 4, pp. 35 - 38 (USSR).

ABSTRACT: Power capacitors for frequencies of 100 - 20 000 c.p.s. are used mainly in connection with furnaces and also to improve the power factor of high-frequency motors in contactless locomotives.

Impregnated-paper capacitors are used for this frequency range because they are compact and cheap, but the power factor falls off badly above 10 000 c.p.s. An equation is given relating the power losses in the dielectric to its physical characteristics. Curves of power factor as functions of frequency and temperature for paper impregnated with oil and Sovol (chlorinated hydrocarbon) are plotted in Fig.1. To improve heat-transfer, high-frequency capacitors are so constructed that alternate foils project at either side of the winding, bringing them all directly into contact with a cooling surface (see Fig.2). Temperature distribution inside capacitors of this kind is considered and the usual ways of reducing the internal temperature drop are

Card1/3

110-4-12/25

High-frequency Capacitors with Impregnated Paper Dielectric

described.

Two different types of cooling are used in oil-impregnated-paper capacitors. In one the heat is removed by the cooling fluid, which circulates round the section. With this construction, gaps must be left between the sections to permit flow of oil. In the second, heat is transferred directly from the section to the cooling medium (air or water) and the capacitor foils are connected to the tank and to tubes either by mechanical contact or by soldering. This method of cooling is almost exclusively used for capacitors for frequencies above 1 000 c.p.s. The characteristics of standard capacitors types 3MB and 3MB7 are recorded in Table 1 and described. Dimensioned outline drawings of the capacitors are given in Fig.3. Factors that must be taken into account in calculating the amount of cooling water required are stated. An expression is derived for the quantity of cooling water.

Calculations show that increase of output per unit of capacitor may be achieved if oil is replaced by chlorinated hydrocarbon. When Sovol is used, the safe temperature is higher and the stress in the dielectric can be greater. Production of capacitors, types 3CB and 3CB7 impregnated with Sovol is expected shortly.

Card 2/3

110-4-12/25

High-frequency Capacitors with Impregnated Paper Dielectric

The characteristics of high-frequency capacitors manufactured by Soviet factories and by some foreign firms are compared in Table 2.

There are 2 tables and 3 figures.

ASSOCIATION: "Kondensator" Works (Zavod "Kondensator")

SUBMITTED: November 11, 1957

AVAILABLE: Library of Congress

Card 3/3

26035

S/105/61/000/008/003/004
E194/E155

9.2110

AUTHOR: Medvedev, S.K., Engineer
TITLE: The permittivity and dissipation factor ($\tan \delta$) of paper dielectric

PERIODICAL: Elektrichestvo, 1961, No.8, pp. 66-72

TEXT: In the design of capacitors it is important to be able to calculate the permittivity and the dissipation factor. Most of the authors who have worked on this subject have considered an equivalent circuit in which the solid dielectric and the impregnant are assumed to be connected in series. Certain authors have given expressions for the permittivity and $\tan \delta$ in terms of the relative volumes of solid dielectric and pores in the combined dielectric. The expressions are given in the following general form:

$$\epsilon = \frac{\epsilon_k}{\beta - \Delta_k(\beta - 1)} \quad (3)$$

$$\tan \delta = \frac{\Delta_k}{\beta - (\beta - 1)\Delta_k} \tan \delta_k + \frac{1 - \Delta_k}{\beta - (\beta - 1)\Delta_k} \tan \delta \quad (4)$$

Card 1/6

The permittivity and dissipation

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S/105/61/000/008/003/004
E194/E155

where: ϵ_k is the permittivity of the cellulose; ϵ is the permittivity of the material filling the pores (air or fluid impregnant); γ_b is the density of the paper; γ_k is the density of the cellulose; $\tan \delta_k$ is the dissipation factor of the cellulose; $\tan \delta_n$ is the dissipation factor of the material in the pores; $\beta = \epsilon_k / \epsilon_n$; Δ_k is the relative volume of the cellular dielectric defined as a ratio of the density of the paper to that of the solid dielectric. As the paper is usually not perfectly dry and not quite tightly packed, a further correction factor is introduced: (5)

$$k = d_1 t / d$$

where: d_1 is the thickness of a single sheet of paper determined in the usual way; t is the number of sheets between plates; d is a nominal thickness which is the mean calculated distance between plates. Thus, allowing for moisture and imperfect pressing, we have: (6)

$$\Delta_k = \frac{100 - X}{100} k \frac{\gamma_b}{\gamma_k}$$

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S/105/61/000/008/003/004
E194/E155

The permittivity and dissipation

These formulae give reasonably accurate values of permittivity but only very approximate values of $\tan \delta$. Accordingly, more accurate formulae are required and amongst others the CIGRE Study Committee No. 18 is working on this subject. More accurate formulae for ϵ and $\tan \delta$ should be based on the actual structure of paper assuming that the actual thickness of cellular material in the space between the plates lies in the range of 0 to unity according to a certain law. It must also be assumed that in any elementary volume the solid dielectric and pores are connected in series; parallel conduction is unlikely to correspond to reality. Curves may be plotted of the area between the plates that is occupied by cellular solid dielectric against the thickness occupied by this material in each elementary volume, giving a function of distribution of thickness of cellular material in the space between the plates. A theoretical formula for this distribution is derived from which the following expression is obtained for the permittivity:

$$\epsilon = \int_0^1 \epsilon_i dx = \epsilon_k \int_0^1 \frac{dx}{\beta - (\beta - 1)x^n} \quad (11)$$

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The permittivity and dissipation

S/105/61/000/008/003/004
E194/E155

The dissipation factor is calculated as the ratio between the summated loss in each elementary volume of dielectric and the reactive VA of the capacitor. On this basis the following formula is derived for $\tan \delta$:

$$\tan \delta = \frac{\int_0^1 \epsilon_i \tan \delta_i dx}{\int_0^1 \epsilon_i dx} = \tan \delta_n \frac{\int_0^1 \frac{x^n dx}{[\beta - (\beta - 1)x^n]^2}}{\int_0^1 \frac{dx}{\beta - (\beta - 1)x^n}} + \tan \delta_n \frac{\int_0^1 \frac{(1-x)^n dx}{[\beta - (\beta - 1)x^n]^2}}{\int_0^1 \frac{dx}{\beta - (\beta - 1)x^n}} \quad (15)$$

As $\tan \delta$ of impregnants is always much less than that of solid dielectric, the second term can generally be neglected. Even when $\tan \delta$ of the impregnant is relatively high, its influence on the $\tan \delta$ of the impregnated dielectric is generally small because of the barrier effect. The new formulae give a lower value of loss for the impregnated dielectric than the old, and are thus nearer to the truth. To check whether there is good agreement between theory and practice it is first necessary that the calculated and experimental values of increase of capacitance on impregnating the

Card 4/6

26035

The permittivity and dissipation.. S/105/61/000/008/003/004
E194/E155

paper should be the same for different values of Δ_k . Data are presented which show that the formulae given above give a better agreement with practice than the usual formulae. Experimental data are presented to substantiate the claim that the formulae offered in this article give values of ϵ and $\tan \delta$ for both unimpregnated and impregnated paper which are in good agreement with experimental results. There is also a brief discussion of $\tan \delta$ as a function of temperature. There are three appendices; the first gives the theoretical derivation of Eq.(11), the second gives approximate methods of integration for use with Eqs. (11) and (15), and the third gives the derivation of the expression for the distribution of thickness of cellular material between the plates. There are 6 figures, 1 table and 6 references: 1 Soviet and 5 English. The four most recent English language references read:
Ref.2: G.S. Endicott. Rev. General Electric, 1949, V.58.
Ref.3: P.D. Wilmot, Industrial Capacitors, El. Rev., 1955, V.156, No.20, p.859.
Ref.4: T. Sakomoto, Y. Yoshida. Research on dielectric properties of impregnated paper as composite dielectrics. ETJ of Japan, March 1956.

Card 5/6

26035

The permittivity and dissipation ... S/105/61/000/008/003/004
E194/E155

Ref.6: D.A. McLean, H.A. Birdshall, C.J. Calbick. Microstructure
of capacitor paper. Ind.Eng.Chem., 1953, V.47, No.7.

SUBMITTED: May 5, 1961

11

Card 6/6

MEDVEDEV, S.K.

Condensers for increasing the power coefficient of a ~~parallel-series~~ connection. Prom. energ. 16 no.4:35-39 Ap '61.
(MIRA 14:9)

(Electric capacitors)
(Electric power distribution)

MEDVEDEV, S.K., inzh.

Overload characteristics of paper-type power condensers.

Vest. elektroprom. 32 no.11:42-45 N '61. (MIRA 14:11)

(Electric capacitors)

MEDVEDEV, S.K., inzh.; KOSTENKO, M.V., prof.; ALEKSANDROV, G.N., kand.tekhn.
nauk, dotsent; KUCHINSKIY, G.S., kand.tekhn.nauk, dotsent; ZALWSSKIY,
A.M., prof.

Some critical remarks on I.U.G.Esikov's article "Distribution of the
intensity of an electric field in a cylindrical condenser."
Elektrichestvo no.10:89-92 0 '65. (MIRA 18:10)

1. Chlen-korrespondent AN SSSR (for Kostenko).

ACC NR: AP7009082

SOURCE CODE: UR.0413/67/000/003/0056/0056

INVENTOR: Medvedev, S. K.; Ginzburg, Ye. L.; Titov, M. M.; Kozlov, Ye. V.; Volkov, S. S.; Bocharov, G. A.

ORG: None

TITLE: A high-voltage pulse capacitor. Class 21, No. 190996 [announced by the Capacitor Design Branch of the All-Union "Order of Lenin" Electrical Engineering Institute im. V. I. Lenin (Filial po kondensatorostroyeniyu Vsesoyuznogo ordena Lenina elektrotekhnicheskogo instituta)]

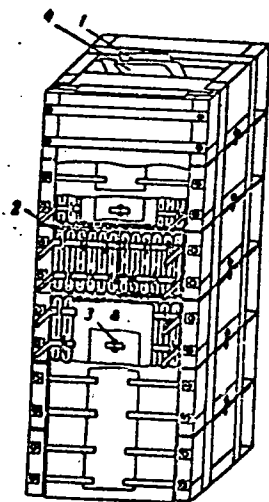
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1967, 56

TOPIC TAGS: electric capacitor, pulse signal

ABSTRACT: This Author's Certificate introduces a high-voltage pulse capacitor equipped with insulating layers made from paper saturated with a liquid dielectric and plates of aluminum foil. The capacitor is made in the form of packets which are electrically and mechanically interconnected. These packets consist of plane-parallel pressed sections with the higher-potential sections located in the middle of the packet and the lower-potential sections at the ends. The leads are connected to accumulator buses. The capacitor is designed for reduced inductance with a simultaneous simplification of production technology. The high-voltage bus is parallel to the end surfaces of the section packets and has holes for passage of the packet taps connected to this bus

ACC NR: AP7009082

from points of high potential. The low-voltage bus is above and parallel to the high-voltage bus and is connected to normally situated packet taps from points of low potential.



1--lower bus; 2--sections; 3--holes; 4--upper bus

SUB CODE: 09/ SUBM DATE: 13Jul64

MEDVEDEV, S.M.

VODNEV, G.G.; SHELKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.N.;
ZASHVARA, V.G.; LITVINENKO, M.S.; MEDVEDEV, K.P.; MOLODTSOV, I.G.;
LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.H.;
DMITRIYEV, M.M.; LEYTES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVIKIN,
A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOV-
SKIY, Ya.M.; KOTKIN, A.M.; ARONOV, S.G.; VOLOSHIN, A.I.; VIROZUB, Ye.V.;
SHVARTS, S.A.; GINSBURG, Ya.Ye.; KOLYANDR, L.Ya.; BELETSKAYA, A.F.;
KUSHNEREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.;
MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.;
GOFTMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PEYSAKHZON, I.B.;
KULAKOV, N.K.; IZRAELIT, E.M.; KVASHA, A.S.; KAPTAN, S.I.; CHERMNYKH,
M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.;
SMUL'SON, A.S.

Boris Iosifovich Kustov; obituary. Koks i khim. no.2:64 '55.(MLRA 9:3)
(Kustov, Boris Iosifovich, 1910-1955)

MEDVEDEV, S.M.

DIDENKO, V.Ye.; TSAREV, M.N.; DMITRIYEV, M.M.; LEYTES, V.A.; OBUKHOVSKIY, Ya.M.; IVANOV, Ye.B.; CHERTOK, V.T.; URSALENKO, R.N.; KRIGER, I.Ya.; PINCHUK, A.K.; ANTONENKO, H.Z.; SMUL'SON, A.S.; VASIL'CHENKO, S.I.; DRASHKO, A.M.; RAYEVSKIY, B.N.; KUCHIRYAVENKO, D.N.; SAVCHUK, A.I.; ZHURAVLEVA, L.I.; BAUTIN, I.G.; KHRIYENKO, V.Ya.; MOSENKO, N.K.; CHEBONENKO, G.P.; LISOV, L.K.; MAMONTOV, V.V.; BELUKHA, A.A.; POYDUN, V.F.; VOLODARSKIY, M.B.; KAL'CHENKO, G.D.; LEVCHENKO, V.M.; BASHKIROV, A.A.; VOROB'YEV, M.F.; IL'CHENKO, L.I.; PODSHIVALOV, F.S.; MOGIL'NIY, P.P.; LEVI, A.R.; VASLYAYEV, G.P.; Durnev, V.V.; OSYPA, S.S.; SAMOFALOV, G.N.; FOMIN, A.F.; LESHCHINA, A.I.; FANKEL'BERG, G.Ye.; KHODANKOV, A.T.; MAKARENKO, I.S.; KARPOVA, K.K.; VASILENKO, I.M.; VOLOSHCHUK, A.S.; SHELKOV, A.K.; FILIPPOV, B.S.; TYUTYUNNIKOV, G.N.; DOLINSKIY, M.Yu.; NIKITINA, P.P.; MEDVEDEV, S.M.; TSOGLIN, M.E.; LERNER, R.Z.; BOGACHEV, V.I.

Mikhail Iakovlevich Moroz; obituary. Koks i khim.no.3:64 '56.(MLRA 9:8)
(Moroz, Mikhail Iakovlevich, 1902?-1956)

MEDVEDEV, S.M.

Improve the training of specialists for the coke chemical industry.
Koks i khim.no.6:55-57 '56. (MLRA 9:10)

1.Glavkoks Ministerstva chernoy metallurgii SSSR.
(Coke industry) (Technical education)

MEDVEDEV, S.M., inzh.

First monorail railroads in Russia. Transp. stroi. 14 no.10:
59 0 '64. (MIRA 18:3)

MEDVEDEV, S. N.

MEDVEDEV, S. N.- "Investigation of Monolithic-assembly Prestressed Reinforced-Concrete Structures." Min of Higher Education USSR, Gor'kiy Engineering-Construction Inst imeni V. P. Chkalov, Voronezh, 1955 (Dissertations For Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

MEDVEDEV, S.N. kand.tekhn.nauk

Calculating monolithic prestressed reinforced concrete construction elements for transverse forces. Shor.trud.VISI
no.4:39-46 '58. (MIRA 12:8)
(Girders--Testing)

MEDVEDEV, S. P.

Incorrect methods for the calculation of speed rate of pushing
tugboat formations. Rech transp. 15 no.7:18-20 J1 '56.

(MIRA 9:9)

1. Starshiy inzhener Tsentral'nogo nauchno-issledovatel'skogo
instituta rechnogo flota.

(Towing) (Tugboats)

BASIN, A.M., doktor tekhn.nauk; MEDVEDEV, S.P., inzh.

Calculating the propeller system of a water-jet vessel by
results of testing on models. Rech.transp. 18 no.11:16-21
N '59. (MIRA 13:4)
(Ship propulsion) (Inland navigation)

MEDVEDEV, S.P., inzh.

Experimental investigation on self-propelled models of the characteristics of water jet propellers. Trudy LIVT no.1:26-36 '60.
(MIRA 15:3)

(Ship propulsion--Models) (Water jet)

MEDEVEDEV, S.P., inzh.

Two-dimensional problem on the interaction between an ideal
propeller and a cylinder in a restricted flow. Trudy L'VT no.
45:44-56 '63. (MIRA 17:6)

L 22481-66 EWT(m)/EWA(d)/T/EWP(t) IJP(c) JD/WB/WE
 ACC NR: AP6007933 SOURCE CODE: UR/0065/66/000/003/0054/0057

AUTHOR: Nikolayeva, V. G.; Komarov, B. I.; Kolotushkina, Ye. V.; Medvedev, S. P.; Ostroushchenko, M. S.

ORG: none

TITLE: High temperature corrosion of metals during combustion of distilled gas-turbine fuels

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 3, 1966, 54-57

TOPIC TAGS: corrosion, solid mechanical property, gas turbine fuel, turbine engine

ABSTRACT: The effect of sulfur content (0.3-2.4%) in vacuum distillation residue and diesel oil fuels on corrosion of gas-turbine metal blades was investigated in the 650-850°C range using a laboratory scale combustion unit. The test duration was 100 hrs. The corrosion of steel and alloy blades in a gas stream during combustion of the thermal catalytic cracking distillates is shown in figure 1. It was found, in the cases of EI-598 nickel-based and EI-607 alloy steels and high-chromium EI-417 steel that the blade corrosion remains in 0.026-0.066 g/m²·hour limits for a wide range of sulfur content in vacuum residue fuels. For diesel oils the material loss remained within 0.038-0.073 g/m²·hour limits. For fuels containing 2.4% S and 0.007% ash, the in-

UDC: 665.521.3:620.193.5

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ACC NR: AP6007933

crease in gas temperature from 650° to 850°C resulted in an increase in deposit on

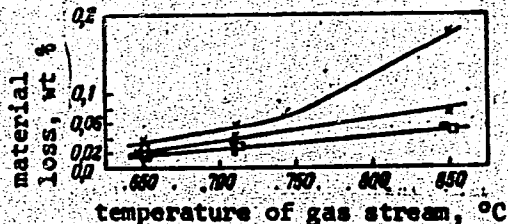


Fig. 1. ● --EI-607 steel; ○--EI-598 steel; []--EI-417 steel; ×--EI-612 steel; V--1Kh18N9T steel.

blades from 0.001 to 0.002-0.004 g/cm². At 850°C, both the low-sulfur gas turbine fuels and the diesel fuels had blade deposits equal to .0006-0.0026 g/cm². In general, fuels of various origins and FBP up to 480°C can be recommended for use as gas turbine fuels. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 21; 11

SUBM DATE: 00/

ORIG REF: 003/

OTH REF: 003

P.A.

L.

570. CONSTRUCTORS AWAIT HELP FROM SCIENTISTS. Medvedev, C.R. (Vestnik Akad. Nauk SSSR (J. Acad. Sci. U.S.S.R.), Dec. 1951, 14-19). Problems arising in the construction of Stalinrad hydro-electric power station, chiefly on the civil engineering side, are stated.

MEDVEDEV, S.R., inzhener; SHESTOPAL, A.O., inzhener.

Constructing a cellular grooved pile enclosure with the use of a vibration
pile driver. Gidr.stroi. 22 no.11:1-6 N-D '53. (MLRA 6:11)
(Pile driving)

MEDVEDEV, S.R., inzhener, laureat Stalinskoy premii; SMOLYAR, A.A., inzhener.

Experience in large-scale sinking of steel sheet piles. Mekh.stroi. 11
no.6:9-12 Ja '54. (MIRA 7:6)
(Pile driving)

MEDVEDEV, S.R., laureat Stalinskoy premii; LYUBIVYY, P.G.

Filters for shaft wells from porous asphalt concrete. Gidr.stroi.
23 no.2:37 '54. (MLRA 7:4)

(Filters and filtration)

MEDVEDEV, S.R., inzhener; SHESTOPAL, A.O., inzhener

Automatic deep water drainage in the Stalingrad Hydroelectric
Power Station project. Mekh.trud.rab. 9 no.5:30-34 My '55.
(MIRA 8:7)

(Stalingrad Hydroelectric Power Station --Hydraulic machinery)

MEDVEDEV, S.R., inzhener; YEMEL'YANOV, F.I., inzhener.

Trench construction for the concrete dam of the Stalingrad
water power development. Gidr.stroi. 25 no.10:1-5 N '56.
(Dams) (MLRA 9:12)

AUTHOR: Medvedev, S.R., Professor SOV/98-58-12-12/21

TITLE: On Filters for Wells (O fil'trakh dlya skvazhin)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 12, pp 42 -
43 (USSR)

ABSTRACT: The author criticizes the properties of existing filters for water supply wells, and for lowering the water level in deep wells. He demands joint efforts by physicists, chemists and engineers to find a filter material possessing hydrophobic properties and to develop the most suitable filter design and the technology of their manufacture. There are 5 photos.

Card 1/1

SOV-98-58-8-8/22

AUTHORS: Medvedev, S.R., Professor, Medvedev, V.M., Candidate of
Technical Sciences

TITLE: Remarks on the Book by TNISGEI on the Permeability of Concrete
(Zamechaniya po rabote TNISGEI o vodopronitsayemosti betona)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 8, pp 29-33 (USSR)

ABSTRACT: The authors criticize a book published by the TNISGEI under
the title "Water-Permeability of Hydrotechnical Concrete".
The first author finds that the book is valuable because it
substantiates the use of the filtration coefficient as a
criterion of the water-permeability of concrete, but he also
considers the method of defining this coefficient as too
complicated for field laboratories. The second author finds
that, although the book proves the insufficient evaluation of
water-permeability according to GOSTs 5795-49 and 4800-49,
the new method is not precise enough.
There are 3 Soviet references.

1. Concrete--Properties 2. Water--Penetration 3. Dams--Seepage

BUKIN, Mikhail Andreyevich; BIRGER, Izrail' Semenovich; MEDVEDEV,
S.R., zasl. deyatel' nauki i tekhniki RSFSR, Laureat Gosu-
darstvennoy premii, prof., red.; BAKUN, A., red.; CHEPELEVA, O.,
tekhn. red.

[Largest in the world; history of the construction of the Volga
Hydroelectric Power Station (22d Congress of the CPSU)] Krup-
neishaia v Mire; k istorii sozdaniia Volzhskoi GES imeni XXII
s"ezda KPSS. Moskva, Sotsekgiz, 1962. 225 p. (MIRA 16:4)
(Volga Hydroelectric Power Station (22d Congress of the CPSU))--
Design and construction)

ca

Organic peroxides. I. Propyl and isopropyl hydroperoxide. II. Reaction between benzoyl hydroperoxide or benzoyl peroxide and triphenylmethyl. S. S. Makhov and E. Aleksieva. J. Gen. Chem. (U. S. S. R.) 1, 1193-9, 1200-8(1931). See C. A. 26, 2412. E. J. C.

COMMON ELEMENTS

ASR-SLA METALLURGICAL LITERATURE CLASSIFICATION

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29TH AND 30TH INDEX

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33RD AND 34TH INDEX

35TH AND 36TH INDEX

37TH AND 38TH INDEX

39TH AND 40TH INDEX

41ST AND 42ND INDEX

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91ST AND 92ND INDEX

93RD AND 94TH INDEX

95TH AND 96TH INDEX

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99TH AND 100TH INDEX

10

ca

Oxidation of methane to formaldehyde. S. S. Medvedev. *Natural Gases U. S. S. R.* No. 4/5, 29-32 (1932).—
 CH₄ passed over a catalytic mass prepd. from Fe borate and Sn phosphate at 600-10° yielded 10.3 mg. of CH₂O per l. of gas mixt. Presence of gaseous (0.3%) HCl in the gas mixt. considerably increased the yield of CH₂O in the presence of Al and Fe phosphate catalysts, but on a further increase of the HCl concn. the yield was lowered. An increase in O₂ in the gas mixt. favored the formation of CH₂O, but lowered the "useful oxidation" of CH₄. The oxidation of CH₄ with air (in the presence of catalysts) yielded 5% of CH₂O; oxidation with O₂ yielded 3%. A change in the gas mixt. during the reaction had little influence on the yield and compn. of the formalin condensate. The liquid condensate contained 25-6% HCHO. A layout of the app. for the oxidation of CH₄ from the Surakhany natural gas (CO₂ 20.5, O₂ 3.51, N₂ 19.0, CH₄ 55.9 and C₂H₆ 0.64%) is given
 A. A. Podgoruy

COMMON ELEMENTS

OPEN

ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION

10

Velocity of the reaction between organic per acids and cyclohexene. S. Medvedev and O. Blokh. *J. Phys. Chem.* (U. S. S. R.) 6, 731-30 (1933).—Studies of perbenzoic, *p*-methoxyperbenzoic, *p*- and *m*-nitroperbenzoic, α - and β -peraphthalic, peracetic and phenylperacetic acids show that the reaction between org. peroxides and cyclohexene at 25° in the main follows the bimol. law. *K*, calcd. as a const. of the 2nd order, is a function of the initial concn. of peroxide, but does not depend upon the initial concn. of cyclohexene. The nature of the solvent affects greatly the speed of reaction of peroxide with cyclohexene; the ratio (*K* in benzene) / (*K* in xylene) being const. with an av. value 1.76. The reactivities of acyl radicals with these peroxides are in the same order as for the corresponding acyl halides. The values of *K* at 25 ± 0.1° increase in the same order and are for the per acid in benzene at 25° and in xylene at 0° and 25°, resp., as solvents: peracetic —, 0.007, 0.0770; perbenzoic 0.504, 0.0663, 0.508; phenylperacetic —, 0.103; *p*-methoxyperbenzoic —, 0.059, 0.212; α -peraphthalic 0.877, 0.0821, 0.519; β -peraphthalic —, —, 0.540; *p*-nitroperbenzoic 4.10, 0.309, 2.24; *m*-nitroperbenzoic —, 0.243,

2.10. The energy of activation is fairly const. and equal to 14,000 cal., while the Arrhenius coeff. A varies from 2×10^6 for *p*-methoxybenzoic to 4×10^{11} for *p*-nitrobenzoic acid. F. H. R.

AS 354 METALLURGICAL LITERATURE CLASSIFICATION

19

CH

Wood alcohol oils. S. I. Rubin and S. S. Medvedev. *Applied Chem.* (U. S. S. R.) 6, 311-19(1933).—In the investigation of wood alc. oils the following substances were detected: in the water-insol. part: EtCOCHMe, EtCOPr and MeCOBu; in the water-sol. part: acetone, EtCOCHMe, cyclopentanone, allyl and crotonyl alcs., and (CH₃OMe)₂. The main constituent of the oil is a ketone, this making it a valuable solvent. A. A. B.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

111 AND 112 GROUPS PROCESSES AND PROPERTIES INDEX

10

The vapor phase catalytic hydrolysis of alkyl halides.

II. The preparation of methanol, formaldehyde and benzoyl chloride from methyl chloride, dichloromethane and benzotrichloride. A. Abkin and S. Medvedev. *J. Chem. Ind. (Moscow)* 1934, No. 1, 30-4; cf. *J. Phys. Chem. (U. S. S. R.)* 4, 731(1933). - MeCl and CH_2Cl_2 may be hydrolyzed by passing them with steam over Sn phosphate deposited on pumice. TiO_2 and mixts. of Sn and Fe phosphates are unsatisfactory. When hydrolyzed at 400° , MeCl gives 10% MeOH and 18.6% CH_3O . CH_2Cl_2 gives 75.5% CH_3O . If mixts. of MeCl and CH_2Cl_2 are run at 400° , CH_2Cl_2 gives 90% CH_3O and the MeCl is 30% hydrolyzed. The residual MeCl may be recirculated, in which case 3-4 cycles are required for its complete hydrolysis, or it may be further chlorinated to CH_2Cl_2 . The ratio of chlorides to H_2O for hydrolysis should be 1:10. PhCCl_3 and H_2O in the ratio 1:1 at 400° give 100% H_2C .

H. M. Lechevster

COMMON ELEMENTS

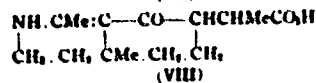
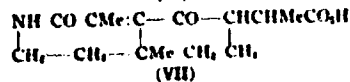
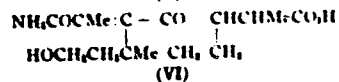
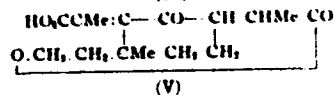
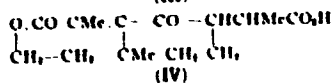
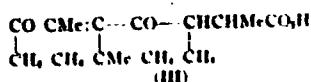
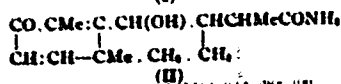
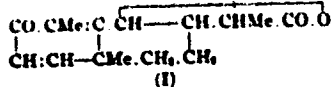
COMMON VARIABLE INDEX

ASME-SLA METALLURGICAL LITERATURE CLASSIFICATION

111 AND 112 GROUPS

111 AND 112 GROUPS

The structure of *santonin* and *santoninic acid*. A. Abkin and S. Medvedev, *J. Gen. Chem.* (U. S. S. R.) 4, 1407-14 (1934). *Santonin* (I) dissolved in liquid NH_3 in a sealed tube at room temp. within 3 days. Evapn. of the NH_3 and purification of the residue with dry boiling PhH gave in quant. yield the *amide* (II) of *santoninic acid*, m. $162-3^\circ$ (decoups.). II with hot alkali soln., alc. and H_2O readily gave I, although dry II is stable. II crystd. from $CHCl_3$ with 1 mol. of $CHCl_3$ removed completely only by heating *in vacuo*. In the presence of moisture both NH_3 and $CHCl_3$ were evolved while the cryst. form was retained. It was not possible to convert II to the lactam analog of I. Addnl. evidence was obtained for the structure III for *santoninic acid*. An improved method for prep. III consists in refluxing 250 g. $Ba(OH)_2$ with 260 cc. H_2O for 1 hr. in the absence of CO_2 , then adding 50 g. of I and boiling for 12 hrs. Cooling, shaking in portions with concd. HCl , extg. with Et_2O , evapn. the Et_2O , purifying by dissolving in Na_2CO_3 soln. and reprecip. with HCl , and finally recrystg. twice from 60% alc. gave colorless III, m. $162-3^\circ$, in 55% yield. III with H_2SO_4 gave a lactone (IV), which could be isomerized to another lactone (V). IV gave the amide (VI) with liquid NH_3 . VI gave the lactam (VII) but could not be converted to VIII. III (15 g.) in 200 cc. $AcOH$



117 AND 120 GROUPS

PROCESSES AND PROPERTIES INDEX

30

Polymerizing Chloroprene. A. D. Ahkin, S. S. Medvedev, and V. S. Klimenkov. Russ. 45,000, Nov. 30, 1945. The polymerization is effected in the presence of tetralin peroxide as catalyst.

ASD SLA METALLURGICAL LITERATURE CLASSIFICATION

117 AND 120 GROUPS

117 AND 120 GROUPS

10

CH

Thermal decomposition of methyl hydroperoxide.
S. Medvedev and A. Podypolskaya. *Acta Physico-*
Chim. U. R. S. S. 2, 487-604(1935)(in German).—A
stream of pure N was passed through MeOOH, bp 29-31°,
wt = 1.3041, and then through a reaction tube of suprenex,
glow heated to 200-400°. The products of reaction are
MeOH, MeO, HCHO, HCOH, O₂, CO, CO₂ and H₂O
but no H₂ or CH₄. MeOOH was detd. by reaction with
1 cc. 25% H₂SO₄ and 1.5 cc. 10% KI, left standing for
1 hr. and then titrated with Na₂S₂O₃ soln. The value so
found is then 78.9%, 80.2% and 90.8% of the true concn,
of MeOOH for 0.2, 0.1 and 0.05% solns., resp. (cf.
Rieche and Hitz, C. A. 24, 1078). HCHO was detd.
iodometrically in alkali. A correction for MeOOH was
made. HCOH was converted to the Ne salt, and a 4%
detd. by the KMnO₄-KI-Na₂S₂O₃ method, and a 4%
correction factor applied. Gases were detd. in a Schmidt
app. The C-H balance was always good for the sum of
the products. The compn. of the products of the reaction

for various times of contact at temps. from 200° to 300°, then
indicates that the amt. of MeOH rises to 62%, then
slowly falls to 40% and less, CO rises to 23%, MeO
very slowly rises to at least 25%, HCHO rises to 10%,
and HCOH to 5% and CO₂ appears late, rises to 5% and
then slowly decreases again. The sum of MeOH and
MeO after the max. of MeOH is const. With increasing
temp. of decomp. the amt. of MeO increases and MeOH
decreases but the sum increases; O₂ increases. HCOH
decreases to 5%, CO is const., CO₂ increases. These
results indicate 2 processes, viz., MeOOH = CH₃O +
H₂O, MeOOH + HCHO = MeOOCH₂OH = HCOH +
MeOH, and HCOH = CO + H₂O with an over-all
activation energy of 10,950 cal. and h₀ 0.0108 at 200°.
0.0812 at 300° and 2MeOOH = 2MeOH + O₂, 2MeOH
= Me₂O + H₂O, 2CO + O₂ = 2CO₂, with E = 25,330 cal.
and h₀ = 7.60 at 200° and 812 at 300°. F. H. R.

PROCESSES AND PROPERTIES																									
KINETICS AND MECHANISM OF (ORGANIC) POLYMERIZATION																									
Kinetics and mechanism of (organic) polymerization processes. S. S. Medvedev. (<i>Org. Chem. Ind.</i> (U. S. S. R.) 3, 472-81 (1937). A discussion based chiefly on literature with 20 references.																									
ASACSLA METALLURGICAL LITERATURE CLASSIFICATION																									

1ST AND 2ND COPIES		3RD AND 4TH COPIES	
Rate of peroxides in the oxidation of hydrocarbons. S. S. Medvedev, Acta Physicochim. U. R. S. S. R. 305, 425 (1958).—Two stable chain processes are evident			
in the oxidation of hydrocarbons. The first is due to the thermal activation of the original substances and the second to the utilization of the energy liberated during the decomposition of peroxides. For the first process, the energy of activation, E_1, depends on the nature of the initial hydrocarbon, and the rate, w_1, depends strongly on the temp. For the second process E_2 differs little from the energy of activation of the decomposition reactions of alkyl peroxides. w_2 is proportional to c^2 (c = hydrocarbon concn.); w_1 increases and w_2 decreases with increase in the concn. of peroxide and carbonyl compounds. w_1 is also decreased and, during the first stages, w_2 is increased by an increase in the surface of the reaction chamber. During the oxidation of tetralin (I), I H peroxide (II) and tetralone (III) are formed. The addn. of II increases the oxidation rate of I, the increase being greater when the III content of the original I is high. III decreases the total oxidation rate.			
B. C. P. A.			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION			
FROM SOURCE			

23

new debarking machine at the Balakhninskii paper mill.
V. Khovanshii and S. S. Medvedev. *Bumashkopy*
Prum. 16, No. 7, 67 (1938). Performance of the ETS
debarking machine. H. G. Zalegaller. *Ibid.* 74-7.
Knives of the ETS debarking machine. B. V. Zotova.
Ibid. 78-80. -- Construction and operation details.
Chas. Blanc